CLAIM AMENDMENTS

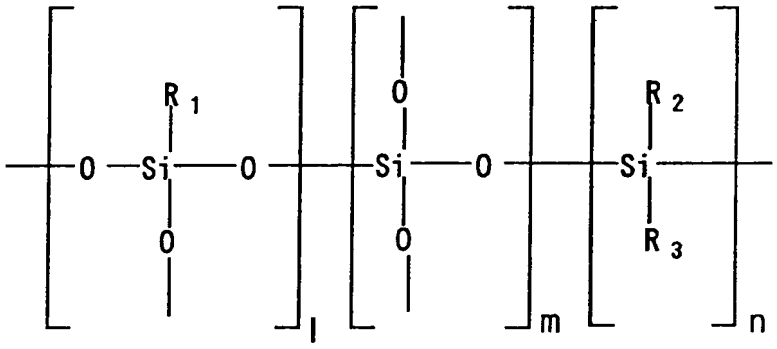
1. (Currently Amended) A magnetoresistance sensor element comprising:

a sensor substrate; and

a ~~flat~~ sensing portion comprising slender wires supported by the sensor substrate~~;~~, wherein the surface of the ~~flat~~ sensing portion is covered with a silicone resin film.

2. (Currently Amended) The magnetoresistance sensor element according to Claim 1 wherein the silicone resin film is a film of a cured silicone polymer.

3. (Currently Amended) The magnetoresistance sensor element according to Claim 2, wherein the silicone polymer is represented by the following general formula ~~(1)~~



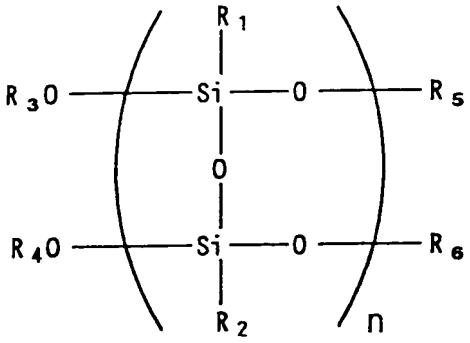
wherein

R1, R2, and R3, which may be the same or different, ~~and~~ are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, a hydroxyl, a trialkylsilyl, and a functional group having an unsaturated bond,

l, m, and n are integers and ~~at least 0~~ $l + m + n \geq 1$, and

the silicone polymer has a weight average molecular weight of not less than 1000.

4. (Currently Amended) The magnetoresistance sensor element according to Claim 2, wherein the silicone polymer is represented by the following general formula ~~(2)~~



wherein

R1 and R2, which may be the same or different, ~~and~~ are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, and a functional group having an unsaturated bond,

R3, R4, R5, and R6, which may be the same or different, ~~and~~ are selected from the group consisting of hydrogen, an aryl, an aliphatic alkyl, a trialkylsilyl, and a functional group having an unsaturated bond,

n is an ~~integers~~ integer and at least 1, and

the silicone polymer has a weight average molecular weight of not less than 1000.

5. (Currently Amended) The magnetoresistance sensor element according to Claim 3 wherein the silicone polymer is a ~~photocuring~~ photocured polymer.

6. (Currently Amended) The magnetoresistance sensor element according to Claim 4 wherein the silicone polymer is a ~~photocuring~~ photocured polymer.

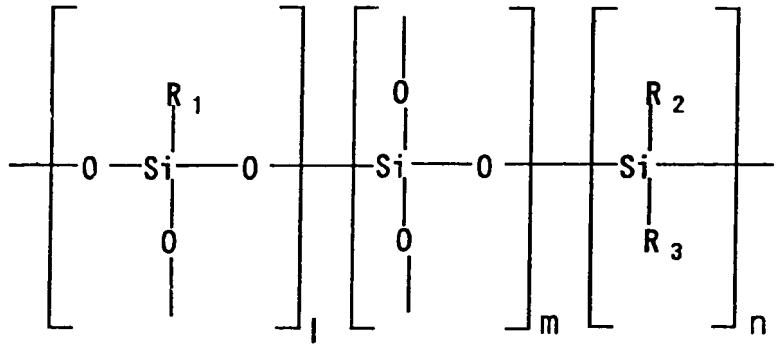
Claim 7 (Cancelled)

8. (Currently Amended) A method of fabricating a magnetoresistance sensor element comprising:

coating a ~~flat~~ sensing portion comprising slender wires supported by a sensor substrate with a solution of a silicone polymer; and

heating and curing the solution to form a silicone resin film on the ~~flat~~ sensing portion.

9. (Currently Amended) The method of fabricating a magnetoresistance sensor element according to Claim 8, wherein the silicone polymer is represented by the following general formula ~~(1)~~



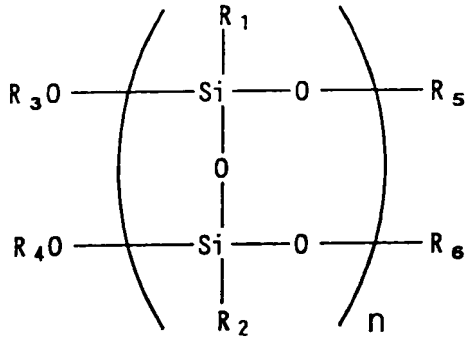
wherein

R1, R2, and R3, which may be the same or different, ~~and~~ are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, a hydroxyl, a trialkylsilyl, and a functional group having an unsaturated bond,

1, m, and n are integers and ~~at least 0~~ $l + m + n \geq 1$, and

the silicone polymer has a weight average molecular weight of not less than 1000.

10. (Currently Amended) The method of fabricating a magnetoresistance sensor element according to Claim 8, wherein the silicone polymer is represented by the following general formula ~~(2)~~



wherein

R1 and R2, which may be the same or different, ~~and~~ are selected from the group consisting of an aryl, hydrogen, an aliphatic alkyl, and a functional group having an unsaturated bond,

R3, R4, R5, and R6, which may be the same or different, ~~and~~ are selected from the group consisting of hydrogen, an aryl, an aliphatic alkyl, a trialkylsilyl, and a functional group having an unsaturated bond,

n is an ~~integers~~ integer and at least 1, and

the silicone polymer has a weight average molecular weight of not less than 1000.

11. (Currently Amended) The method of fabricating a magnetoresistance sensor element according to Claim 9 including curing the silicone polymer with light.

12. (Currently Amended) The method of fabricating a magnetoresistance sensor element according to Claim 10 including curing the silicone polymer with light.

13. (Currently Amended) The method of fabricating a magnetoresistance sensor element according to Claim 8 including ~~heating and~~ curing the solution at a temperature ~~of~~ from 100°C to 250°C.